

METHOD AND APPARATUS OF DETECTING DISTURBANCES IN A CENTRIFUGAL PUMP

Abstract of Disclosure

The present invention is directed to a centrifugal pump wherein voltage and current data are detected from voltage and current sensors in the motor controller of a pump motor. A power signal is then generated from the voltage and current data and spectrally analyzed to determine the presence of unwanted harmonics which are indicative of mechanical disturbances in the pump. As such, anomalies resulting from mechanical interference may be detected and a warning flag provided without additional transducers and other instruments on the motor or pump.